

Implications of Changing Marine Ecosystems

- *Moderator: Francis Wiese, Stantec*
- *Panel: Lene Kielsen Holm, Greenland Institute of Natural Resources*
- *Ann Robertson, Office of U.S. Senator Murkowski (Alaska)*
- *Paul Wassmann, UiT - The Arctic University of Norwa*

This Panel focuses on the socio-ecological implications of a rapidly changing Arctic marine ecosystem. Atmospheric and oceanographic changes have been turning a mostly ice-covered, knowledge-limited ocean into one increasingly accessible to commercial activities with increased environmental variability and vulnerability. Temperature increases, sea ice reductions and increased stratification have led to changes in production, species abundance and distribution across all levels of the Arctic marine ecosystem with direct implications for species viability, and traditional use of the Arctic by local peoples, as well national and international policies on the environment, sovereignty, security, and resources use. Our panelists provide a diverse perspective of past, current and future changes, its local, regional, national and international implications, and how we may address current and future challenges from a knowledge and policy perspective. Discussions will center around information needs at different scales, ideas and lessons learned on how to best inform policy making with scientific and indigenous knowledge, how to shape and implement the indispensable, unifying conceptual model for the one Arctic Ocean ecosystem, and opportunities for partnerships to overcome current challenges.